



## About This Method



This document helps you to monitor small- to medium-sized mammals using cage traps. This method has been developed by the Monitoring Country staff. You can find more information on the Monitoring Country website: [monitoringcountry.org.au](http://monitoringcountry.org.au) or scan the QR code.



This method has three parts: **1. Get Ready**, **2. Out on Country** and **3. Back in the Office**. Each part can be undertaken separately but you must complete all three parts to finish the method. At the end of the document, you will find guidance for all the gear you need - **Gather Your Gear – Complete List**.

We recommend you read the whole document before you start.

## Part 1: Get Ready



### GATHER YOUR GEAR



#### Equipment required for this part:

- Tablets/phones with:
  - ability to take photos
  - data collection and navigation apps
- Laptop/computer with software for:
  - mapping
- GPS device (recommended)

### KEEP IN MIND



#### Why?

Make sure there is a clear [monitoring question](#) and that the [method](#) you have selected will answer the monitoring question.

If this is the first time you are monitoring, you will need to [design the survey](#): what are you monitoring, where will you survey, and when and how often you will survey?





## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping



### When?

Prepare well before heading out on Country so that you have time to gather gear or train staff, if needed.



### Who?

At least 1 ranger/staff to plan and prepare.

Consult species experts for guidance on how to conduct trapping for the species at your location(s).



### Training and skills

Staff involved in planning are trained and competent in:

- Mapping software (like QGIS or Google Earth) and/or [monitoring point generator](#)
- Navigation systems (like Avenza app or GPS device)
- Data collection systems (like Fulcrum app or paper datasheets)
- Scientific licensing and ethics permit requirements
- Animal handling and ethics training



### Check permissions

Consult with Traditional Owners, landholders and relevant government agencies and authorities, to determine appropriate access and approvals for environmental monitoring:

1. Where you can go – consult with the owners/managers of the land.
2. What you can do – check if you need [scientific licences or ethics permits](#)
3. What or who can you take photos of
4. What can be done with data and photos – who owns them, where will they be stored and how will data be interpreted and communicated.

## ACTIONS



### Make a plan and prepare



*If you have done this monitoring before, it is best to do the surveys at the same time and same sites so that you can compare the data to previous surveys and see if there have been changes.*

1. Plan which dates you will do the cage trapping surveys
  - A minimum of 4 nights is recommended per trapping session

## Mammal Cage Trapping

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## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping

- How long and how frequently you do the cage trapping will depend on what you need to know and what species you are trying to trap
  - Avoid trapping in mammal breeding seasons when
    - Lactating females may be separated from their dependent young (like when young are denned and females are out foraging) or
    - When females are more likely to have pouch young that may cause ethical concerns e.g. macropods can eject their pouch young when stressed
  - Avoid trapping in extreme weather conditions (hot or cold) or heavy rain
2. Plan what times of day/night you will be checking the cage traps
    - Most Australian mammals are nocturnal, so it is best practice to clear traps by 3 hours after sunrise
    - How often and at what times you check the traps will depend on the species you are trapping, how cold or warm it is going to be, and your animal ethics permits
    - Avoid leaving animals in traps for long periods, especially in very cold or hot weather
    - Some mammals get capture myopathy
      - This is when they get very stressed from being in a trap and can die
      - If you are likely to catch high risk species (macropods) you should check traps earlier in the night and/or more frequently
  3. Gather species of interest [records in your area](#) and identify where potential species of interest habitat is.
    - Such as from Traditional Owners, [Atlas of Living Australia](#) (ALA) or government databases.
  4. Plan what data you need to collect for the species you have chosen
    - Foot size measurements, weight, DNA samples, health indicators (disease, fur condition, weight), reproductive status, age etc
  5. Plan if animals needs to be individually identifiable
    - i.e. a unique way of marking the animal so that it can be recognised in the future
    - permanent options include ear notching (with numbering systems), ear tags (metal or plastic bands with letters/numbers), or microchips (inserted under the skin)
    - Non-permanent options include marking with coloured paint pens or clipping fur, but these are only short-term identifiers
  6. Use the [monitoring point generator](#) or mapping software to select your sites
    - How many and where the sites are will depend on what you are trying to find out
    - Consider the data you need, and the target species' likely use of the habitat, home range size and welfare implications

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## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping

- Traps can be on transects that follow along roads that you drive, or in transects or grids or in the bush that you walk between, or placed randomly in preferred habitat
  - 1-4 road-based transects of 50 cage traps each spaced at 200 m is a common design for monitoring medium-sized mammals
7. Give each site a unique name, and export and save the location data in your data management system
    - If there is only one cage per site, the cage and the site have the same name
    - If there is more than one cage per site you can mark each cage individually if they are spaced far apart (not recommended – keep them closer together)
  8. Prepare maps of sites and load sites onto navigation devices
  9. Plan how you will record information on Country (electronic data forms or paper datasheets)
  10. Plan your [data management system](#) (how you will store trap check and capture data)
  11. Check **GATHER YOUR GEAR** lists for **Get Ready**, **Out on Country** and **Back in the Office** ([complete list on last page](#)) and get any equipment you don't have.
    - See [buying guide\(s\)](#) for advice on which trapping equipment may be suitable
  12. Charge electronic devices (tablets/phones, power banks, GPS) and batteries

## Train

1. Check the **Training and skills** requirements for **Get Ready**, **Out on Country** and **Back in the Office** steps and arrange any training or expertise that you need.
2. Run everyone involved in the survey through the plan.
  - Be clear on how many people will be involved, what everyone will be doing, and what they will need to do the survey.
3. Run a training session for all rangers involved in the survey to learn or refresh:
  - a. How to use the devices (like tablets/phones and GPS)
  - b. How to use data collections apps and record data
  - c. How to identify species of interest
  - d. Animal handling procedures

## Next Section – Part 2: Out on Country

## Mammal Cage Trapping

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## Mammal Cage Trapping



# Part 2: Out on Country



## GATHER YOUR GEAR



**One set of this equipment for each team:**

- Tablets/phones
- Power bank (optional)
- GPS device and spare batteries (recommended)
- Datasheets: trap check datasheet (paper) and capture data (electronic device)
- VHF or UHF radio (handheld or car mounted)
- Headtorch (if setting or clearing traps in the dark)
- Handling bags (large cotton bags with ties)
- Spare cage traps
- Spare hessian sacks
- Permanent marker
- Container with enough lure/bait for each trap site (and spare)
- Tongs or spoons (optional, if baiting traps with meat)
- Hand sanitiser and/or water and soap
- Animal safe residual insecticide (like Coopex)
- Reference documents or field guides: Mammal identification keys
- Stationery: pencil, pencil sharpener, eraser, permanent marker
- Trapping kit:
  - Weighing scales (Pesola digital scale or spring scales with hook in relevant weight for target species, e.g. 1kg, 600g and/or 300g)
  - Digital or vernier callipers (digital callipers don't work in the rain!)
  - Plastic ruler for simple measurements
  - Animal first aid including adhesive under wrap for repouching (like Fixomull stretch tape), vet-grade antiseptic (like Cetrigen) and saline solution
  - OPTIONAL – tools to permanently mark individuals: microchips and microchip scanner, ear tags and applicators, or ear punch
  - OPTIONAL – tools to non-permanently mark individuals: xylene-free paint pen or scissors/razors
  - OPTIONAL – tools to take genetic samples from ears: ear punch or sharp surgical scissors, alcohol swabs, lighter and genetic sample tubes (like Eppendorfs) filled with 70-90% ethanol.





## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping

### One set of this equipment for each site:

- Cage trap
- Hessian sack
- Prepared bait
- Flagging tape

## KEEP IN MIND



### When?

Close traps if extreme temperatures (very hot or very cold), heavy rainfall, high winds or bush fires are predicted.



### Who?



At least 2 people per team.

The team leader must be an experienced and approved animal handler.



### Training and skills

Make sure everyone knows the plan.

Field staff are trained and competent in:

- Navigation systems (like Avenza app or GPS device)
- Data collection systems (like Fulcrum app or paper datasheets)
- Setting up and safely checking and clearing cage traps

Team leader trained and competent in:

- Scientific licencing and ethics permits requirements
- Handling and processing animals, including identifying mammals, permanent marking of individuals, euthanasia, dealing with pouch young, and dealing with venomous and dangerous by-catch.

Staff managing daily data are trained and competent in:

- Spreadsheet software (like Microsoft Excel)
- Data collection systems (like Fulcrum, paper datasheets)

## Mammal Cage Trapping

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## Mammal Cage Trapping



### ACTIONS

-  Check that your electronic devices (tablets/phones, power banks, GPS, batteries, radios, head torches) are charged before you head out.

#### Setting and positioning traps

1. Drive or walk to the first trap site
2. Place the trap in a protected position so that it is:
  - a. At least 5 metres from the road (or 10-20 m if the road is used by other people)
  - b. Facing away from the road and facing away from where you will approach
  - c. Protected from sun, wind and rain by vegetation (check that it will be shady in the morning – typically southwest side of vegetation)
  - d. On flat and stable ground
  - e. Not on or nearby an ant nest
3. Cover the back half of the trap with a hessian sack
  - Secure the hessian so that wind or animals won't dislodge it
4. Clear the area in front of the trap door from vegetation, rocks, sticks or leaves that might stop the door from closing
5. Place the bait at the back of the trap, behind the treadle
  - Make sure the bait isn't under the treadle and cannot be reached from the outside
6. Test that the trap is working properly, and that the door fully shuts
7. Set the trap
8. Ensure the location of the trap is well marked by either tying reflective flagging tape onto vegetation directly above the trap or by using the GPS to record the exact location of the trap
  - If the site is publicly accessible, the trap should be well hidden to prevent unwanted interference
  - Recommended: label the flagging tape with the site number
-  9. Continue to your next site, and complete steps 2-8 until all traps have been set
  - If you don't set some of the traps, record these as 'SHUT' on your **trap check data** so that the team checking the traps knows exactly which traps haven't been set

#### Checking traps and processing animals

1. Drive or walk to the first trap site
  - Even if the trap has been marked as 'SHUT' on the **trap check data**, it is still a good idea to go to the site and check the trap

## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping



2. Collect two handling bags
  - Handling bags can be reused between animals but use a fresh bag if one becomes dirty or wet (scat, blood)
  - Carry a smaller handling bag in your pocket in case of ejected pouch young
3. Approach the trap as quietly as possible
  - Avoid slamming car doors, talking loudly or walking loudly
4. Look to see whether the trap door is open or shut
5. If the door is open, collect the bait and shut the door
6. If the door is closed, look inside the trap to check if there is an animal
  - Use one of the handling bags to quickly cover the front half of the trap that isn't covered by the hessian
  - Covering the trap can help to calm an agitated animal, which may prevent a pouch young from being ejected
7. If there isn't an animal, fully remove the hessian and look under the treadle to make sure there isn't anything in the trap, collect the bait, and shut the door
8. If there is an animal, quickly and quietly remove the animal from the trap:
  - a. Place the other handling bag over the door end of the trap, making sure there are no gaps
  - b. Open the door of the trap so that the animal can walk into the bag
    - If the animal has pouch young, take extra care
    - This should be done as quickly as possible but without risking the mother escaping and leaving her pouch young behind
    - If large or dangerous or other non-target animals are captured (snakes, goannas, echidnas), if safe to do so, the door can be propped open, and the cage turned gently upside down, to allow the animal to leave when it's ready
  - c. Encourage the animal to go into the bag by lifting the hessian and/or blowing on the animal from behind with short, sharp breaths
    - Avoid lifting or shaking the trap
  - d. Once the animal is fully inside the bag, close the bag and tie it shut
    - Check that the animal's tail is out of the way before you tie the bag
    - Hold the bag above where it is tied to avoid getting bitten
  - e. Remove the hessian to check if there are any young left inside or near the trap.
  - f. Collect the bait and shut the door
9. Check that the bait has been removed and the trap has been shut properly to avoid capturing any more animals

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## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping



10. Put the bait into the bait container
11. Check the site ID by comparing the flagging tape label and/or GPS waypoint
-  12. Record **trap check data** by writing the trap status for the trap, either:
  - species of animal caught
  - open with bait (OB)
  - open with no bait (ONB)
  - closed with bait (CB)
  - closed with no bait (CNB)
-  13. Collect and record **animal data** (including marking individuals and taking samples)
  - Ensure that consistent measurement units are used e.g. millimetres for body measurements and grams for weights
  - If you are not sure about the species identification, take photos of identifying features and/or consult a field guide
14. Release the animal at its capture site
  - Do not tip the animal out of the bag
  - Ensure a clear pathway for release – not blocked by trees, shrubs etc
  - Avoid releasing onto the road or directly next to the car
  - Listen for pouch young calls or noises – check inside the handling bag after release
  - After release and weighing the bag, it is good practice to shake out the handling bag to remove any scat, fur etc
15. Continue to your next site, and complete steps 2-14 until all traps have been checked
16. Before leaving your final site, have a look at your **trap check data** to make sure that all the traps have been checked

## Daily data management

-  1. After everyone has finished checking their traps, collect the **trap check data** and **animal data** from that morning
2. Check the data to see if there is missing information or any issues (e.g. traps moved or shut because of ants, broken traps, issues with pouch young, soft releases to be checked)
3. If you are using individual identification, create a re-trap list
  - A list of all the animals that have been captured and individually marked
  - If any of these animals are recaptured, they don't need to be processed again
  - Include details like individual ID (e.g. microchip number), pouch young, injuries and missing data

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**ENVIRONMENTAL MONITORING METHOD:**

# Mammal Cage Trapping

4. Make sure any devices are charged, trapping kits are re-stocked and re-trap lists are provided to each trapping team
5. Put any DNA samples collected into the fridge (or a cool room with a consistent temperature)
6. Inform team leaders of any data or trap issues they need to be aware of before resetting and checking traps

**Resetting traps**

*Re-open traps in the late afternoon.*

1. Drive or walk to the first trap site
2. If the trap wasn't shaded in the morning or had an issue with ants, move the trap to a better spot
3. Check that the trap is covered by the thick hessian and weighed down
4. Put fresh bait into the back of the trap
5. Test that the trap is working properly, and the door fully shuts
6. Reset the trap
-  7. Continue to your next site, and complete steps 2-6 until all traps have been set
  - If you don't set some of the traps, note these as 'SHUT' on your **trap check data** so that the team checking the traps knows exactly which traps haven't been set

**Collecting traps**

1. On the final trapping morning, traps and hessians must be collected
  - Traps can either be collected as each site is cleared, or they can be collected after all sites have been cleared
2. Collect any flagging tape
3. After you have collected your traps and before leaving the area, count the traps to make sure you haven't forgotten any

## RECORD DATA



### Data to record when setting and checking traps

What to record	Required?	Notes
<i>Information to record about each trap check</i>		
Project name	Yes	Make it clear which project this data belongs to and its purpose

ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping



What to record	Required?	Notes
Date	Yes	Record the date the traps were checked
Personnel	Yes	Record the name of the people who checked the traps - this is helpful if any questions come up about the data
Number of traps	Yes	Know how many traps you are supposed to check each day and count the number of traps you did check at the end of the trapping session.
<i>Information to record about each trap that was checked</i>		
Site name/number	Yes	Always check the site number against the flagging tape and GPS coordinates or map.
Trap checked	Yes	Record that the trap was checked.
<i>Suggested information to record about each trap check and/or each trap that was checked</i>		
Trap status	Optional	Record the status of the trap (e.g. animal caught, whether the trap was not set, or it was open or closed, with or without bait etc.).
Animal Identification	Optional	An animal's individual identification can be one of the most important pieces of information. Writing the animal identification or adding the microchip sticker can help figure out any mistakes if the information wasn't entered correctly into the electronic device.
Trap issues	Optional	Record whether there were issues with the trap e.g. ants, door not shut, hessian disturbed etc.
Start and end time of trap check	Optional	Record what time you started and ended your trap check.
Habitat description and/or photo	Optional	Describe or take a photo of the vegetation type and landscape features at the site
Signs of introduced species	Optional	Are there signs of introduced species like cats and foxes e.g. tracks or scats?
Stories and notes	Optional	Record information or stories from Elders, and anything else worth noting about the area or animals.
Video	Optional	Record videos of information or stories from Elders, and rangers performing or describing the work they are doing.



## Data to record when animals are trapped

What to record	Required?	Notes
<i>Information to record about each animal trapped</i>		
Project name	Yes	Make it clear which project this data belongs to and its purpose
Date	Yes	Record the date animal was captured

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## ENVIRONMENTAL MONITORING METHOD:

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Personnel	Yes	Record the name of the people who processed the animal and recorded the data - this is helpful if any questions come up about the animal or data
Site name/number	Yes	
Species	Yes	
Animal individual identification	Optional	This is usually used for permanent individual marking, such as microchip or ear tag number
Weight	Optional	Specify the measurement unit to be used. Grams (g) is usually the standard unit for small - medium sized animals.
Sex	Optional	
Age	Optional	Age can be determined based on things like size, weight, breeding status or tooth wear.
Breeding status	Yes	Breeding status can be determined based on things like age, weight, pouch status, testes size, nipple colour and size, scent glands, fat deposits. This is particularly important information for female animals that may have pouch young or dependent young.
Sample number	Optional	If you have taken samples (e.g. DNA, ectoparasite, swabs), record the sample number of the sample tube. It is useful to have the sample tubes pre-labelled with an individual number or label them with the animal's individual ID (e.g. microchip number).
Illness, injuries, abnormalities	Optional	Information on whether an animal is sick, has a high parasite load, has lost fur or has an injury.
Unexpected outcome	Yes	Record if an animal (including pouch young) has died or has to be euthanised.

**Next section – Part 3: Back in the Office**

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# Part 3: Back in the Office



## GATHER YOUR GEAR



### Equipment required for this part:

- Tablets/phones and paper datasheets that you used to record trap check and animal capture data
- Data management system
- Laptop or computer with software for:
  - Spreadsheets
  - Mapping
- Disinfectant solution: diluted F10 (as recommended on label) or chlorine bleach (1:10)
- Safety data sheets for F10 or chlorine bleach
- Personal Protective Equipment (as recommended on the chemical safety sheets)
- Spray bottles for F10 solution or large tubs for chlorine bleach solution
- Washing line
- Flagging tape
- Hose (high pressure hose recommended)

## KEEP IN MIND



### When?

Always try to complete this work as soon as you can after returning from your time on Country so that data and photos are appropriately managed.

Clean and put away equipment as soon as possible after trapping finishes, preferably the same day, using appropriate disinfectant and cleaning protocols (can be region- or species-specific).



### Who?



At least 1 person from each trapping team to clean and put away equipment



At least 1 person to manage the data



## Mammal Cage Trapping



### Training and skills

Staff managing data are trained and competent in:

- Mapping software (like QGIS or Google Earth)
- Spreadsheet software (like Microsoft Excel)
- Data collection systems (like Fulcrum app or paper datasheets)
- Data management systems (like databases, cloud storage and external hard drives)
- Interpreting chemical safety data sheets for chosen disinfectant
- Optional: data analyses for modelling occupancy and population size

## ACTIONS



### Clean up

1. All equipment must be cleaned and disinfected with F10 or chlorine bleach solutions
2. Read the F10 or chlorine bleach safety data sheet and wear the recommended PPE
3. Dilute the F10 (as recommended on label) or chlorine bleach (1:10 solution)
4. Shake out, clean and hang hessians on washing line, disinfecting by either:
  - a. Immersing in diluted chlorine solution (optional: soak for 10 minutes) and then rinsing with fresh water or
  - b. Spraying all surfaces with diluted F10
5. Clean the traps by hosing down with water to remove dirt, scat, bait and leaves, and disinfect by:
  - a. Immersing in diluted chlorine solution (optional: soak for 10 minutes) and then rinsing with fresh water or
  - b. Spraying all surfaces with diluted F10
  - c. Wash traps outside on concrete using a high-pressure hose
6. Leave hessians and cage traps to dry in the sun for at least 10 minutes
7. Tie flagging tape onto any cage traps that need repair
8. Shake out trapping bags and turn inside out
9. Wash trapping bags with diluted F10 or diluted chlorine solution
  - You can use a washing machine but make sure you wash the bags separately from personal clothing and clean the washing machine after use
  - Make sure bags are rinsed with fresh water after disinfecting
10. Hang trapping bags to dry in the sun for at least 10 minutes
11. Check bags for holes and loose threads and set aside any that need fixing.
12. Clean out trapping kits and note down any equipment or supplies that need replacing



## Mammal Cage Trapping



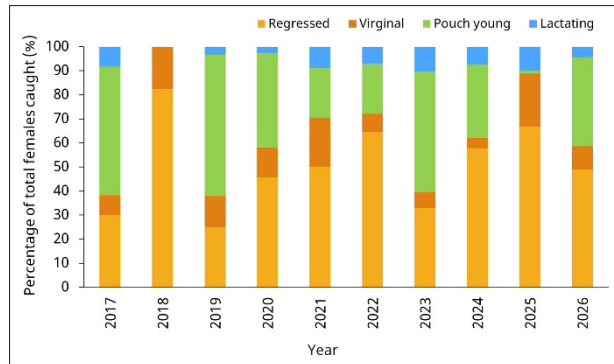
13. Once dry, pack away clean traps, hessians, trapping bags and any other equipment



### Data entry, analysis and reporting

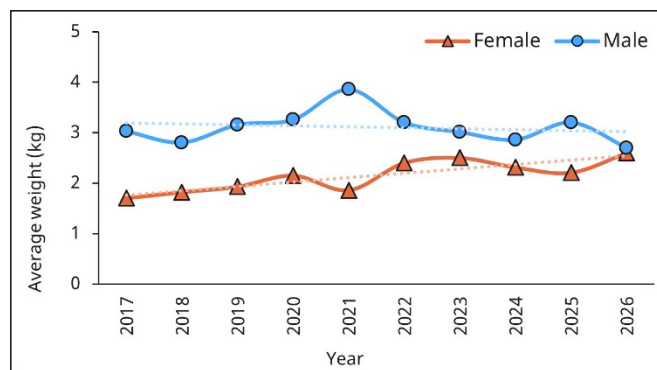
1. Record a summary of what you did and why, any observations (like weather conditions, fire history), anything that went wrong or didn't work and things that worked well
2. Upload the **trap check and animal data** to your data management system
  - Recommended: get someone else to proof the data to check for mistakes
3. Upload any photos or videos taken during the survey to your data management system
4. Copy the data into a spreadsheet and calculate one or more of the following:
  - You may only want to calculate these for the target species, species of interest like threatened animals or species with a lot of captures.
    - a. Species richness (how many different species were captured)
    - b. Total number of captures (for all species and/or for each species)
    - c. Demographic details (for each species)
      - i. Total numbers of males and females, or the ratio of males to females
      - ii. Total numbers of adults and sub-adults
      - iii. Total numbers of new animals and previously caught animals
    - d. Reproductive and health details (for each species)
      - i. Total numbers of breeding and non-breeding males
      - ii. Total numbers of females in each breeding stage, or breeding stages as percentages of total females caught
      - iii. Average weight and/or body condition of adult males and females
5. OPTIONAL: if you or a team member have statistics skills, use capture-recapture modelling to calculate:
  - a. population estimate (total number of individuals in the population)
  - b. population density (number of individuals per hectare)
6. Make simple graphs of your data, for example:
  - a. A stacked bar chart of female breeding stages can help you see changes in breeding success over time

## ENVIRONMENTAL MONITORING METHOD: Mammal Cage Trapping



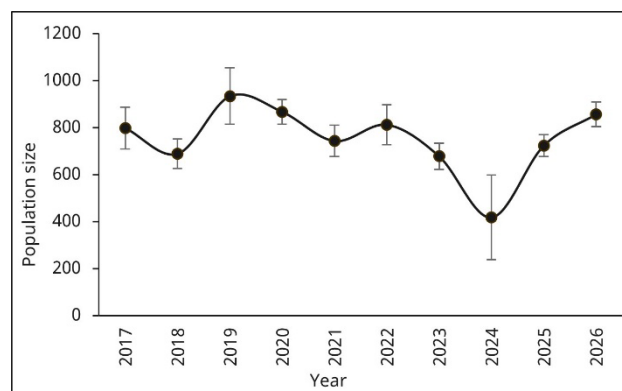
An example of how female reproduction can be presented in a stacked bar chart  
(Image created using example data – numbers are not real)

- b. A line chart with trendlines can help you see if things like average weight or the number of males and females are changing over time



An example how average weights can be presented in a line graph  
(Image created with example data – numbers are not real)

- c. A line chart with error bars (lowest and highest estimates) can show you how population size is changing over time

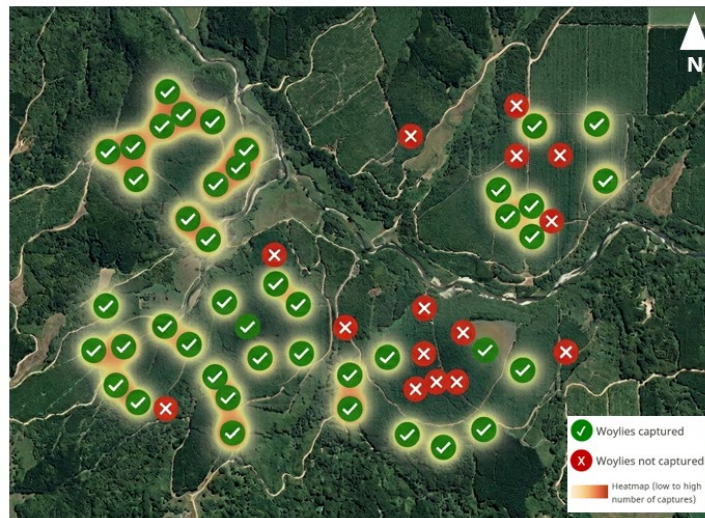


An example of how populations size can be presented in a line graph  
(Image created with example data – numbers are not real)

## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping

7. Use mapping software to create a map for each species with:
  - You may only want to make maps for the target species, species of interest like threatened animals or species with a lot of captures.
    - a. Basemap of survey area (like a satellite image, topographic map or digital maps like Google Roads or Google Earth)
    - b. Every site where you had a trap
    - c. Where the species was or wasn't captured during the survey
    - d. Heatmaps showing how many times the species was captured at each site



*An example of how capture data can be presented in a map  
(Image created with assistance from Gemini, a large language model by Google AI).*

8. Discuss with the ranger team or community the results of the monitoring, any reasons for the presence or absence of species, or the patterns observed in captures, and if there have been any changes to previous years.
  - Consider whether trends might be related to your management (like feral predator control) to check how well management is working, or if you need to make adjustments.
9. Share the data according to any data sharing or funding agreements you have made

### Next section – Full Equipment List



## Gather Your Gear – Complete List



The complete **GATHER YOUR GEAR** list for **Get Ready**, **Out on Country** and **Back in the Office**.

Gear List	Required?	Get Ready	On Country	In Office
Tablets/phones: <ul style="list-style-type: none"> <li>Ability to take photos</li> <li>Apps for data collection (like Fulcrum) and navigation (like Avenza)</li> </ul>	✓	✓	✓	✓
Laptop or computer with software for: <ul style="list-style-type: none"> <li>Mapping (like QGIS or Google Earth)</li> <li>Spreadsheets (like Microsoft Excel)</li> </ul>	✓	✓	✓	✓
GPS device & spare batteries	<b>Recommended</b>	✓	✓	
Power bank	<b>Recommended</b>		✓	
VHF or UHF Radio	<b>Recommended</b>		✓	
Headtorch & spare batteries	<b>If checking traps at night/before sunrise</b>		✓	
Cage traps (e.g. Sheffield small animal trap) <ul style="list-style-type: none"> <li>treadle plate mechanism</li> <li>no bait hook or a hook that has been closed to form a loop</li> <li>no sharp edges that can hurt an animal</li> <li>correct size for target species (e.g. 22cm x 22cm x 55cm with 11mm mesh spacing)</li> </ul>	✓		✓	✓
Hessian sacks <ul style="list-style-type: none"> <li>heavy duty</li> <li>correct size (approx. 100mm x 60mm)</li> </ul>	✓		✓	✓
Bucket of pre-prepared lure/bait	✓		✓	
Tongs	<b>Recommended for meat-based lure/bait</b>		✓	
Flagging tape and reflective tape	<b>Recommended</b>		✓	
Clipboard with <ul style="list-style-type: none"> <li>Trap check datasheets</li> <li>Re-trap list</li> </ul>	✓		✓	
Stationery: <ul style="list-style-type: none"> <li>Pencil</li> <li>Eraser</li> <li>Pencil sharpener</li> <li>Permanent marker</li> </ul>				

**ENVIRONMENTAL MONITORING METHOD:**

**Mammal Cage Trapping**

Gear List	Required?	Get Ready	On Country	In Office
Large handling bags <ul style="list-style-type: none"> <li>Thick but soft and breathable material like cotton drill</li> <li>Dark coloured material</li> <li>Approx. 75 cm x 55 cm</li> </ul>	✓		✓	✓
Small handling bags <ul style="list-style-type: none"> <li>For thrown pouch young</li> <li>Thick but soft and breathable material like polar fleece</li> <li>Dark coloured material</li> <li>Approx. 25 cm x 30 cm</li> </ul>	✓		✓	✓
Trapping kit including: <ul style="list-style-type: none"> <li>Weight scales</li> <li>Calipers (digital or vernier)</li> <li>Ruler</li> <li>Permanent marker</li> <li>Animal first aid – adhesive stretch tape, wound treatment, saline solution</li> <li>Disposable gloves</li> <li>Hand sanitiser or soap</li> <li>Optional - tools to permanently mark individuals: microchips and microchip scanner, ear tags and applicators, or ear punch</li> <li>Optional – tools to non-permanently mark individuals: xylene-free paint pen or scissors/razors</li> <li>Optional – tools to take genetic sample from ears: ear punch or sharp surgical scissors, alcohol swabs, lighter and genetic sample tubes (like Eppendorfs) filled with 70-90% ethanol.</li> </ul>	✓		✓	✓
Mammal reference documents and/or field guides	✓		✓	
Snake handling kit	<b>Optional</b>		✓	
Solution for cleaning equipment: F10 or Chlorine bleach (1:10) <i>Don't forget to dilute to the recommended solution, read the safety datasheets and wear the recommended PPE!</i>	✓			✓
Spray bottle and/or tubs for cleaning equipment	✓			✓
Washing line	✓			✓
High pressure washer/hose	✓			✓

**Mammal Cage Trapping**

Get Ready
On Country
In Office
**Gear List**



## ENVIRONMENTAL MONITORING METHOD:

# Mammal Cage Trapping

Gear List	Required?	Get Ready	On Country	In Office
Data management system (like databases, cloud storage and external hard drives)	✓			✓

## Mammal Cage Trapping

Get Ready

On Country

In Office

**Gear List**

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We acknowledge Aboriginal and Torres Strait Islanders as the Traditional Owners and Custodians of Country and recognise their continuing connection to and stewardship of land, water, and sea. We honour their culture, customs, and community. We pay our respects to their Ancestors, Elders, and future leaders.

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